WHAT IS CLAIMED IS:

Sub/1.

A medical article comprising a liquid-impervious, moisture-vapor permeable polymeric film having directly bonded thereto an absorbent, substantially nonswellable foam.

2. The medical article of claim 1 which has a dry moisture vapor transmission rate of less than about 2000 g/m²/24 hours at 38°C and 20% relative humidity.

5 kg

15

3. The medical article of plaim 2 which has a wet moisture vapor transmission rate of at least about 3000 g/m²/24 hours at 38°C and 20% relative humidity.

4. The medical article of claim 3 which has a wet moisture vapor transmission rate of at least about 5000 g/m²/24 hours at 38°C and 20% relative humidity.

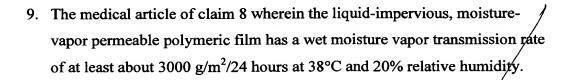
5. The medical article of claim 2 which has a dry moisture vapor transmission rate of less than about 1800 g/m²/24 hours at 38°C and 20% relative humidity.

20

- 6. The medical article of claim 5 which has a dry moisture vapor transmission rate of less than about 1500 g/m²/24 hours at 38°C and 20% relative humidity.
- 25 7. The medical article of claim 1 wherein the foam absorbs greater than 250% by weight aqueous saline solution when immersed in phosphate buffered saline containing 0.9 wt-% NaCl at 37°C for 30 minutes.
- 8. The medical article of claim 1 wherein the liquid-impervious, moisturevapor permeable polymeric film has a dry moisture vapor transmission rate of at least about 300 g/m²/24 hours at 38°C and 20% relative humidity.

10

25



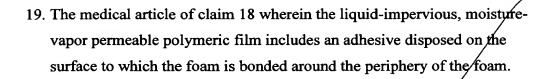
- 5 10. The medical article of claim 1 wherein the liquid-impervious, moisturevapor permeable polymeric film comprises one or more layers
 - 11. The medical article of claim 1 wherein the liquid-impervious, moisture-vapor permeable polymeric film is a thermoplastic polygrethane.

12. The medical article of claim 1 wherein the liquid-impervious, moisture-vapor permeable polymeric film has a thickness of about 10 microns to about 250 microns.

- 13. The medical article of claim 1 wherein the substantially nonswellable foam increases in volume by no greater than about 10% following a 30-minute soaking in phosphate buffered saline at 37°C.
- 14. The medical article of claim 13 wherein the substantially nonswellable foam increases in volume by no greater than about 5% following a 30-minute soaking in phosphate buffered saline at 37°C.
 - 15. The medical article of claim 1 wherein the substantially nonswellable foam is an open cell foam.

16. The medical article of claim 15 wherein the substantially nonswellable foam comprises a polyurethane

- 17. The medical article of claim 1 wherein the liquid-impervious, moisturevapor permeable polymeric film includes graphics printed thereon.
 - 18. The medical article of claim 1 wherein the liquid-impervious, moisture-vapor permeable polymeric film extends beyond a periphery of the foam.



- 20. The medical article of claim 1 wherein a nonwoven, woven, or knit web is bonded to the moisture-vapor polymeric film on a surface opposite the surface to which the foam is bonded.
- 10 21. The medical article of claim 20 wherein the moisture-vapor polymeric film is bonded to the nonwoven, woven, or knit web with a fibrous adhesive.
 - 22. The medical article of claim 1 wherein the foam is cast directly on the film.
- 15 23. The medical article of claim 1 which is a wound dressing.

24. A medical article comprising a liquid-impervious, moisture-vapor permeable polymeric film having directly bonded thereto an absorbent foam, wherein the article has a dry moisture vapor transmission rate of less than 2000 g/m²/24 hours and a wet moisture vapor transmission rate of at

25. The medical article of claim 24 which has a wet moisture vapor transmission rate of at least about 5000 g/m²/24 hours at 38°C and 20% relative humidity.

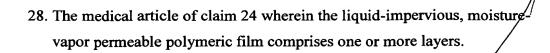
least about 3000 g/m²/24 hours, at 38°C and 20% relative humidity.

- 26. The medical article of claim 24 which has a dry moisture vapor transmission rate of less than about 1800 g/m²/24 hours at 38°C and 20% relative humidity.
- 27. The medical article of claim 24 wherein the foam absorbs greater than 250% by weight aqueous saline solution when immersed in buffered saline containing 0.9 wt-% NaCl at 37°Q for 30 minutes.

30

25

5



- 5 29. The medical article of claim 24 wherein the substantially nonswellable foam increases in volume by no greater than about 10% following a 30-minute soaking in phosphate buffered saline at 37°C.
- 30. The medical article of claim 24 wherein the substantially nonswellable foam is an open cell foam.
 - 31. The medical article of claim 24 wherein the liquid-impervious, moisturevapor permeable polymeric film extends beyond a periphery of the foam.
- 15 32. The medical article of claim 31 wherein the liquid-impervious, moisturevapor permeable polymeric film includes an adhesive disposed on the surface to which the foam is bonded around the periphery of the foam.
- 33. The medical article of claim 24 wherein a nonwoven, woven, or knit web is bonded to the moisture-vapor, polymeric film on a surface opposite the surface to which the foam is bonded.
 - 34. The medical article of claim 24 wherein the foam is cast directly on the film.
- 25 35. The medical article of claim 24 which is a wound dressing.

